indeed even the Cushing "Life of Sir William Osler." It is as fine a contribution to autobiographic writing as I have known.

Dr. Robert M. Green, associate professor of anatomy at Harvard, also writing of this book, asks: "Can any man be wholly known to his contemporaries? Oliver Wendell Holmes, autocrat, anatomist, and poet, wrote that each of us has at least three personalities: one as he is known to his maker, one as he is known to his fellow men, and one as he is known to himself. It is this third intrinsic personality of RS which Dr. Zinsser from long acquaintance and intimate documents has revealed. Out of an alembic mixture of recollection, personal confession and observation, he has recreated for us the real self of a man whom we have long admired and loved, but not fully appreciated."

Many of us are sensible of and in accord with this statement, and those of us who have been acquainted with Dr. Zinsser during the past few years recognize from his last writings not only elements of his character that we knew, but in addition other traits apparent, the existence of which we had not even realized or appreciated. For as he once wrote, as Carlyle says of Schiller, "the man's heart which few knew was as true and noble as his genius which all knew."

Dr. Zinsser, in his last chapter, in which the end of the life of RS is described, relates that during the last months his philosophy ripened and that he achieved a certain degree of philosophical tranquility, revealing something of the sweetness and the light of love in his soul. Although moving further away from faith in any comprehensible conception of God, yet he grew closer to the conviction of the wisdom and guiding integrity of the compassionate philosophy of Christ. He "felt increasingly grateful for the fact that death was coming to him with due warning, and gradually. So many times in his active life he had been near sudden death by accident, violence or acute disease; and always he had thought that rapid and unexpected extinction would be most merciful. But now he was thankful that he had time to compose his spirit and to spend a last year in affectionate and actually merry association with those dear to him. He set down this feeling in his last sonnet:

> Now is death merciful. He calls me hence
> Gently, with friendly soothing of my fears
> Of ugly age and feeble impotence
> And cruel disintegration of slow years.
> Nor does he leap upon me unaware
> Like some wild beast that hungers for its prey,
> But gives me kindly warning to prepare:
> Before I go, to kiss your tears away.
> How sweet the summer! And the autumn shone
> Late warmth within our hearts as in the sky,
> Ripening rich harvest that our love had sown
> How good that 'ere the winter comes, I die!
> Then, ageless, in your heart I'll come to rest
> Serene and proud, as when you loved me best.[3]

Dr. Zinsser lived a very full and unusually active life almost to the moment of his death, and the influence of his example and career will long continue. His deep faith in the power of honest scientific work to promote human welfare will long be a guiding light to others. His spirit will benefit humanity for many years to come, and no one who ever knew him will forget him.

RICHARD P. STRONG

SCIENTIFIC EVENTS

POLLUTION INVESTIGATIONS OF THE FISHERIES SERVICE

ACCORDING to *The Fisheries Service Bulletin,* Dr. M. M. Ellis, in charge of the service's pollution investigations in relation to aquatic life, reports that the field surveys carried out this summer have resulted in the collection of more material and more data than any previous trip. This success is attributed by Dr. Ellis, in part, to the use of new analytical methods and new physiological apparatus in the laboratory trucks from which the surveys were made.

During part of the month of July Dr. Ellis and his party visited the Black Hills region of South Dakota, where they cooperated with state officials in a study of gold-mine wastes in relation to stream conditions and fish life. A second problem investigated at the request of the state was the extent to which beaver dams modify stream conditions and water characteristics. Dr. Ellis reports that the beaver-dam problem in South Dakota appears to differ considerably from the situation in Michigan and other localities where these dams have been studied previously.

After collecting material related to the study of arsenic pollution at Gardiner, Mont., the field party proceeded to central Idaho for a study of irrigation waters from the Snake River, and thence to the Salmon River Valley to continue the studies of salmon spawning streams begun in previous years. Using Red Fish Lake in the Sawtooth Mountains as a base, the investigators were successful in securing much new data on these salmon spawning waters and also on waters frequented by the so-called redfish.

Mine-waste problems in the Coeur d'Alene region of Idaho engaged the attention of the field party for approximately ten days, after which it proceeded to Rock Island Dam on the Columbia River. Dr. Ellis has been following the changes in the water of the

[3] Quotation by permission of the *Atlantic Monthly.*

Columbia and tributary streams since before the construction of the Grand Coulee Dam. These observations were greatly extended this summer, and in addition extensive physiological studies were made of the salmon and other fish passing through the Rock Island traps.

During the latter part of August studies were conducted of glacial waters near Mount Ranier and Mount Shasta, investigations which are closely related to the Sacramento River project and its effect on aquatic life.

THE MEDICOFILM SERVICE OF THE ARMY MEDICAL LIBRARY

ACCORDING to a statement by the librarian of the Medical Corps of the U. S. Army, Colonel Harold W. Jones, under the authority of the Surgeon General of the Army, microfilm copying from the medical collections of the Army Medical Library has been conducted for nearly three years by Bibliofilm Service, a non-profit agency having its headquarters in the library of the U. S. Department of Agriculture. Although this service has rendered valuable aid to many research workers, it is believed that a microfilm copying service operating within the Library itself, and specializing in the field of medicine, will be able to contribute even more to the advancement of medical science.

The new service has been established through the generosity of a group of "Friends of the Army Medical Library." It has been given the designation "Medicofilm Service."

The service described will be conducted on a non-profit basis solely for making the extensive medical literature collections of the Army Medical Library available to research workers who are unable to come in person to consult them. The library cooperates by providing the necessary space for the work and by supplying the publications from which the microfilm copies are made. The only cost to the user is for the actual labor and materials required in making and distributing the microfilm copies.

The photographic copies on moving picture film of the separate articles in the periodicals are made at 30 cents for each complete article not exceeding 30 pages in length and 10 cents for each succeeding 10 pages or fraction thereof. A pamphlet describing the service and also containing the latest list of the approximately 4,000 medical and related periodicals currently received by this Library will be sent to those desiring to avail themselves of this service. In addition to medical periodicals the library also possesses an extensive collection of manuscripts and incunabula of which microfilm copies may be obtained. Requests should be made to: Microfilm Service, Army Medical Library, 7th St. and Independence Ave., S.W., Washington, D. C.

THE SEALING OF THE TIME CAPSULE

CEREMONIES incident to the final sealing of the Time Capsule of the exhibit of the Westinghouse Electric and Manufacturing Company at the New York World's Fair took place at noon on September 23. The capsule was deposited in the ground outside the exhibit building before the fair was opened on Septembr 23, 1938.

Harvey D. Gibson, chairman of the World's Fair of 1940, welcomed the gathering, and A. P. Craig, Westinghouse Exhibit director, presided. Dr. Clark Wissler, anthropologist of the American Museum of Natural History, and David S. Youngholm, vice-president of the Westinghouse Electric and Manufacturing Company, took part in the sealing of the capsule. Dr. Albert F. Blakeslee, president of the American Association for the Advancement of Science, made an address at a program "Youth Looks toward the Future," held in the afternoon under the auspices of the American Institute of the City of New York.

During the sealing-in ceremonies, 500 pounds of a special mixture of pitch, chlorinated diphenyl and mineral oil was poured around the capsule. This compound, because it resists electrolysis and is impervious to moisture, will provide a first line of defense against the destructive effects of time. It was developed by J. G. Ford as a seal for condenser bushings in circuit breakers.

The compound remains plastic over a 225 degree Fahrenheit temperature range, from 40 degrees below zero to 185 degrees above. This means that it will not crack open to enable the start of electrolysis. Its dielectric strength enables it to resist an electrical discharge up to 40,000 volts. It is one and one fifteenth times as dense as water, so that moisture can not penetrate to start corrosive action. It will adhere tightly to the metal for many hundreds of years through a wider variation in temperatures than that to which the capsule will be subjected. The capsule itself is made of cupaloy. This is an alloy of 99.4 per cent. copper, .5 per cent. chromium and .1 per cent. silver which can be hardened to the temper of mild steel but retains resistance to corrosion equal to pure copper.

David S. Youngholm, vice-president of the company, made a statement in which he said that more than forty articles used every day by people of the present are packed in the capsule.

Among them are a fountain pen and mechanical pencil, a watch, an electric lamp, a tobacco pouch with zipper, tobacco, pipe, cigarettes, cosmetics, a woman's hat, eyeglasses, toothbrush and powder, a miniature camera and